

EW-453

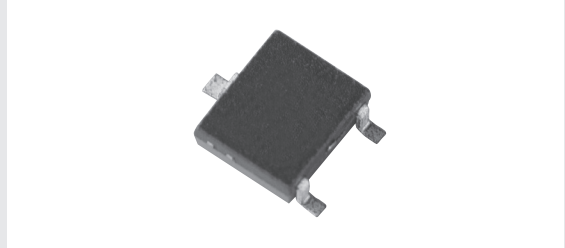
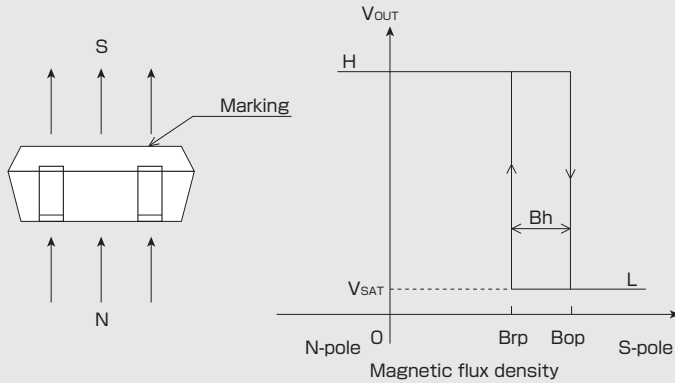
Shipped in packet-tape reel(5000pcs/Reel)

EW-453 is composed of a Ultra-high sensitive InSb Hall element and a signal processing IC chip in a package.

Unipolar Hall Effect Switch	Supply Voltage 2.5~5.5V	Hall Element Continuous Excitation	Low Sensitivity Bop: 10mT	Output Open Collector	SMT
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Notice:It is requested to read and accept "IMPORTANT NOTICE" written on the back of the front cover of this catalogue.

●Operational Characteristics

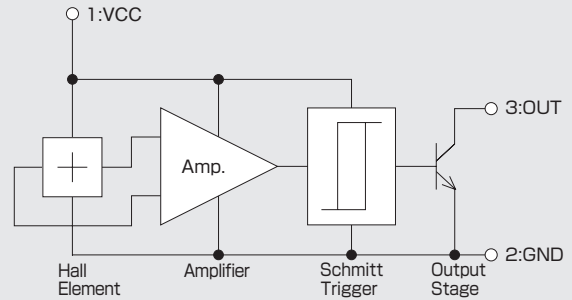


●Absolute Maximum Ratings (Ta=25°C)

Item	Symbol	Min.	Max.	Unit
Supply Voltage	V _{CC}	-0.3	5.5 (*)	V
Output H Voltage	V _{O(off)}	-0.3	V _{CC}	V
Output L Current	I _{SINK}	0	15	mA
Storage Temperature Range	T _{STG}	-40	+125	°C

(*) Please refer to Supply Voltage Derating Curve.

●Functional Block Diagram



●Recommended Operating Conditions

Item	Symbol	Min.	Typ.	Max.	Unit
Supply Voltage	V _{CC}	2.5	3	5.5	V
Operating Temperature Range	T _{opr}	-30	+25	+115	°C

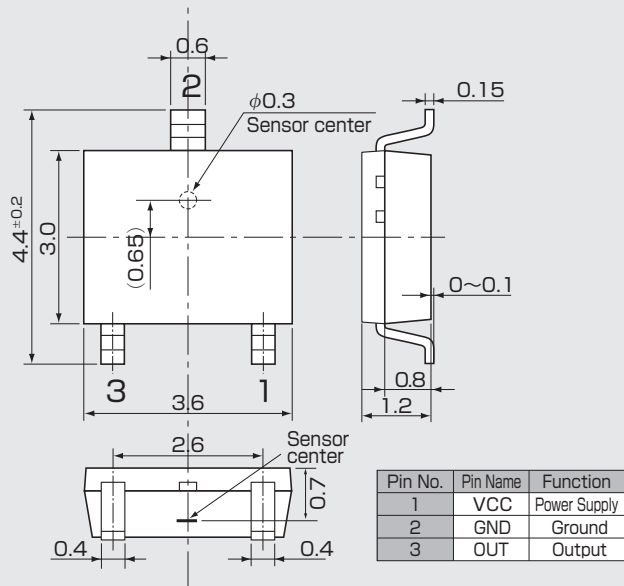
●Magnetic and Electrical Characteristics (Ta=25°C)

Item	Symbol	Conditions	Min.	Typ.	Max.	Unit
Operating Point	Bop	V _{CC} =3V		10	20	mT
Releasing Point	Brp	V _{CC} =3V	5	7.5		mT
Hysteresis	Bh	V _{CC} =3V	1.5	2.5		mT
Output Saturation Voltage	V _{SAT}	V _{CC} =3V, OUT"L", I _{SINK} =10mA			0.4	V
Output Leakage Current	I _{LEAK}	V _{CC} =3V, OUT"H", V _{OUT} =3V			1	μA
Supply Current	I _{CC}	V _{CC} =3V, OUT"H"			8	mA

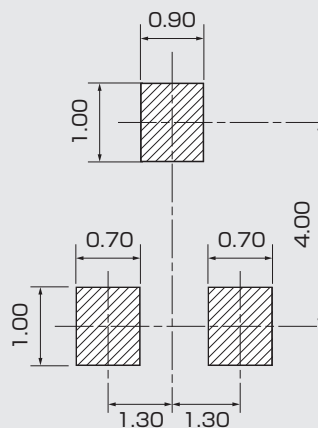
1 [mT] =10 [Gauss]

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●Package (Unit:mm)

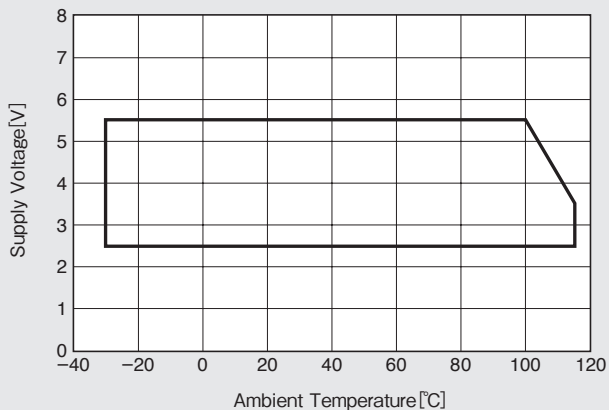


●(For reference only)Land Pattern (Unit:mm)

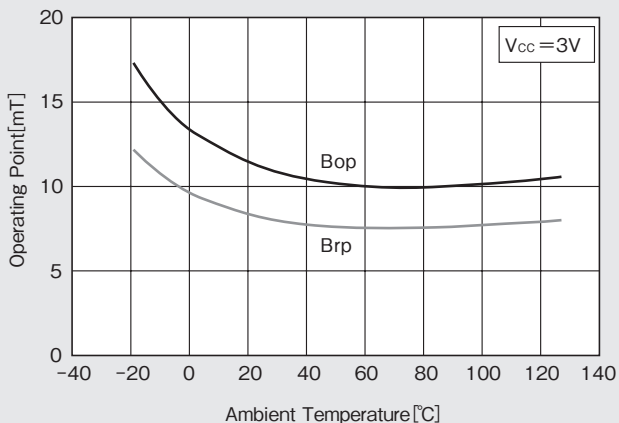


- Note1) The sensor center is located within the $\phi 0.3\text{mm}$ circle.
- Note2) The tolerances of dimensions with no mentions is $\pm 0.1\text{mm}$.
- Note3) The sensor part is located 0.7mm (typ.) far from marking surface.
- Note4) The metal portions on the package side (support lead) are connected to the internal circuits. The support lead should be isolate from the external circuit and the other support lead.

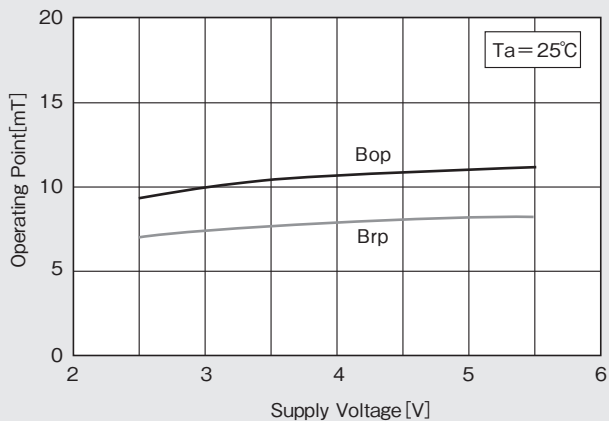
●Supply Voltage



●Temperature Dependence of Bop, Brp



●Supply Voltage Dependence of Bop, Brp



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February 21, 2013

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